

National Landscape Conservation System
National Monument and National Conservation Areas

Manager's Report Summaries

Bureau of Land Management

2008



STEESE NATIONAL CONSERVATION AREA

Natural and Heritage Resource Conditions

The Steese National Conservation Area (NCA) in north-central Alaska encompasses 1.2 million acres of healthy, intact ecosystems. The NCA was designated to manage caribou habitat and water quality. Less than five percent of the NCA has been affected by human use, which includes past placer mining, a few miles of roads, and several hundred miles of OHV routes.

The overall condition of heritage and cultural resources in the NCA was stable in 2008. While slow, natural deterioration continues at most known sites, there were no large-scale, persistent adverse impacts (e.g., river erosion, landslides, wildland fires, or collecting/looting).

Condition of Recreation Facilities, Roads and Trails

All facilities are in good condition and are maintained to meet BLM standards. Regular maintenance was conducted on the Pinnell Mountain National Recreation Trail. A draft NCA Sign Plan was completed in 2008. The University of Alaska conducted a survey of recreational visitors; the information gleaned from this survey is necessary for implementing a benefits based management approach.

Outreach, Environmental Education, Interpretation and Volunteers

The NCA has no visitor center. Its website is one of the primary sources of information for the public. Brochures and four information kiosks at NCA access points provide on-site educational and interpretative information.

Science

BLM has contracted with the University of Alaska Fairbank's Anthropology Department to produce a predictive GIS model for prehistoric archaeological sites. The model, to be completed in February 2009, will produce maps showing potential for prehistoric and historic Alaska Native sites. A four-year study of Dall sheep in the NCA and the White Mountains National Recreation Area was concluded in 2008. A new wintering area was identified, movements between subpopulations observed, visits to mineral licks documented, and the mineral status of this sheep population examined. A moose census and caribou monitoring projects were also conducted.

Partnerships and Collaborative Relationships

The NCA partners with the University of Alaska Fairbanks, Alaska Department of Fish and Game, U.S. Fish and Wildlife Service, and the National Park Service.

Business Practices

The NCA's total federal allocation for 2008 was \$331,000.

ALASKA

WHITE MOUNTAIN NATIONAL RECREATION AREA

Natural and Heritage Resource Conditions

White Mountain National Recreation Area (NRA) in east-central Alaska contains nearly one million acres of an intact, healthy ecosystem with little human-caused disturbance. Less than five percent of the area is considered to be affected by human use, including placer mining, several miles of road, and hundreds of miles of off-highway vehicle trails. The overall conditions of the cultural and natural resource resources in the NRA remain stable. While slow, natural deterioration continues at most known sites, there were no large-scale, persistent adverse impacts occurring to cultural resources in 2008 (e.g., river erosion, landslides, or wildland fires).

Condition of Recreation Facilities, Roads, and Trails

The principal physical facilities, including roads and trails, are in good condition, though a few roads, trails, and campgrounds are in need of repair. Facilities include three campgrounds, twelve public use cabins, two trail shelters, seventeen miles of road (including Nome Creek Road), fifty-three miles of maintained summer trails, and several hundred miles of winter maintained trails.

Outreach, Environmental Education, Interpretation, and Volunteers

The NRA website is one of the primary sources of information for the public. The BLM partners with the Alaska Public Lands Information Centers to provide information about recreational opportunities on the NRA. Brochures, eleven highway kiosks, and presentations at public events provide additional educational and interpretative information on natural and cultural resources in the NRA. There is no visitor center.

Science

On-going projects include a snow survey-climate change monitoring project; collection of water quality parameters to document water resource and climate change; a Dall sheep study to identify important sheep habitats and movement routes; caribou monitoring to identify important seasonal habitats; and a moose census to monitor moose response to wildland fire.

Partnerships and Collaborative Relationships

Partners include: National Resources Conservation Service, Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service, the National Park Service, U.S. Forest Service Trails Unlimited Enterprise, and the Student Conservation Association. These partners work on natural and cultural resource monitoring and recreational trail projects.

Business Practices

The NRA's total federal allocation for 2008 was \$901,000.

ARIZONA

AGUA FRIA NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, natural resource conditions at Agua Fria National Monument (Monument) continued to improve. This positive trend was facilitated by new signs designed to keep drivers on existing roads and changes in grazing management intended to improve riparian areas. Drought conditions continued to stress the Monument's endangered Gila chub population. This year the BLM and the Arizona Game and Fish Department entered into an assistance agreement to leverage grassland restoration funds. BLM staff have also been key in developing the Central Arizona Grasslands Plan, which will guide landscape-scale grassland restoration work in the Monument and the neighboring national forests.

Cultural resource conditions remained stable. However, specific sites continued to suffer damage from vandalism, off-highway vehicle use, and recreational shooting.

Recreation Facilities, Roads, and Trails Conditions

The condition of the Monument's few constructed facilities was good. Vandalism of facilities continued, but was mostly visual rather than structural. All roads in the Monument are dirt and most are very rough. Generally, road maintenance is conducted to address only significant safety and resource protection concerns. Road signing began in 2007 based on an inventory of existing roads and continued in 2008. Primary portal signs are needed for Monument access points from the community of Cordes Junction and from the Prescott National Forest. Monument staff continued to see a change in recreation use patterns from overnight weekend visits to more repeated day use from the expanding local population.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, visitation to the Monument was approximately 41,000. The BLM is partnering with Black Canyon Heritage Park on their new visitor center, which will highlight area attractions including the Monument. In April 2008, the Arizona State Director and Congressional staffers toured the Monument and learned about major issues facing management. The BLM and the Monument friends group provided tours for the public, members of the Arizona Archaeological Society chapters, members of the Arizona Hydrological Society, and others. With the support of the friends group, Monument staff provided stewardship project opportunities and on and off-site interpretation and environmental education presentations. Volunteer projects included habitat improvement, interpretation, and outreach on illegal dumping and off-highway vehicle use.

Science

Professors and students from Arizona State University (ASU) continued surveying, mapping, and studying prehistoric cultural resources on the Monument. In 2008, they discovered and mapped at least three extensive systems of prehistoric farming terraces. The Desert Botanical Garden continued inventories of the Monument's vegetation and worked with ASU on a study of prehistoric agave farming. Other research efforts included: analysis of painted pottery from Pueblo la Plata, post-fire restoration studies, and a study of bird distribution on the Monument.

Partnerships and Collaborative Relationships

Monument staff work with the friends group on numerous projects including, invasive weed treatment, cultural site protection and documentation, and, with additional partners, water mapping. Monument Staff also work with numerous other government and non-governmental entities, including: Upper Agua Fria Watershed Partnership, Upper Agua Fria Open Space Alliance, Prescott College, USDA Agricultural Research Service, Arizona Site Stewards, Prescott and Tonto National Forests, and the Arizona Department of Game and Fish.

Business Practices

The Monument's total federal allocation for 2008 was \$662,742.

ARIZONA

GILA BOX RIPARIAN NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

The overall condition of natural resources within the Gila Box Riparian National Conservation Area (NCA) was good. A 2008 assessment found that 100 percent of the NCA met land health standards. However, damage associated with illegal OHV use and the annual monsoons persists. Invasive species were addressed through 13.5 acres of vegetation treatment and the removal of non-native fish from Bonita Creek.

Overall heritage resource condition on the NCA was good. However, several historic homesteads along the Gila River were in poor to failing condition. During 2008, 13 cultural sites were monitored with 9 sites receiving light maintenance. Prehistoric sites within the NCA were in fair to good condition.

Recreation Facilities, Roads, and Trails Conditions

The overall condition of recreation facilities was good, though monsoonal flooding caused light to moderate damage to OHV barriers, boat ramps, roads, and parking areas. New construction in 2008 included installation of a picnic area ramada, construction of the Cottonwood and Mesquite trails, and construction of a handicapped accessible trailhead. The NCA's road system was generally in fair to good condition, though there was a back log of roads requiring maintenance.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, over 36,000 individuals visited the NCA. Approximately 8,500 of these individuals visited an on-site interpretive station. NCA staff provided eight presentations to local schools and community organizations. The NCA currently has no friends group, but the local boy scouts provide a reliable source of volunteers. Including campground hosts, 2,768 hours (\$54,003 in labor dollars) were donated by volunteers in 2008.

Science

Inventory and monitoring were undertaken for native fish, willow fly catcher, yellow billed cuckoo, leopard frog, Mexican garter snake, and raptors.

Partnerships and Collaborative Relationships

An ongoing partnership with the City of Sanford focused on the continued provisioning of quality drinking water while allowing protection and enhancement of the NCA's natural and cultural resources. The BLM also worked collaboratively with the Bureau of Reclamation on the removal of non-native fish from Bonita Creek and with the Arizona Department of Transportation on the construction of an intersection at the junction of a major access road and State Highway 191.

Business Practices

The NCA's total federal allocation for 2008 was \$418,870.

ARIZONA

GRAND CANYON-PARASHANT NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, major natural resource trends at Grand Canyon-Parashant National Monument (Monument) included the loss of plant diversity in the Mojave Desert and changes in the fire regime caused by invasive species. Preventing the conversion to exotics of critical desert tortoise habitat continued to be a challenge. Ninety-three percent of the Monument's grazing allotments have been assessed; 43% were meeting, and 50% were progressing towards, rangeland health standards. Heritage resource conditions were fairly static with only minor damage caused by wildfire, fuels management, vandalism, and other impacts.

Since 1994, the BLM has worked with Northern Arizona University and Arizona Game and Fish Department on the Mt. Trumbull Ecosystem Restoration Project. Pre-restoration inventories were followed by treatment and post-restoration inventories. Under a cooperative agreement, the Grand Canyon Wildlands Council is concluding a feasibility study and restoration plan to rehabilitate and enhance the native biodiversity and ecological function of Pakoon Springs. The BLM also engaged in burned area restoration, including aerial seeding and repairs.

Recreation Facilities, Roads, and Trails Conditions

The administrative facilities on the Monument were generally in good to excellent condition. The Monument has 1,386 miles of dirt roads open to the public, though some are seasonally impassible. Road maintenance was conducted according to an approved schedule. In 2008, the Sawmill/Uinkaret Pueblo interpretive trail was constructed and new trail markers were installed along the Nampaweap trail. A new Monument portal sign was also installed.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, visitation to the Monument was 46,920. The Monument's primary contact station, the Interagency Information Center at the Arizona Strip District Office, hosted 28 brown bag presentations. The Monument also hosted a "Geologist in the Parks" geoscientist and a SCA Jr. Ranger Ambassador. The BLM and the National Park Service jointly conducted a camp to reconnect Southern Paiute youth with their traditional Arizona Strip homelands. Monument staff also presented educational programs on ecology and the prehistoric human experience on the Arizona Strip. In partnership with Southern Utah University, the Monument offered an outdoor learning experience for collegiate honors students. Volunteers contributed over 4,000 hours to the Monument in 2008, performing services such as staffing the Information Center, transplanting riparian vegetation, removing invasive species, and rock art documentation.

Science

Research on the Monument focused on the following areas: biological soil crusts, bryophyte and algae diversity and distribution, Mojave Desert tortoise habitat restoration, brome fungus, the history of Grand Gulch Mine, and oral history collection from early homesteader's descendents. For the 6th year, Nevada State College ran an archeological field school at the Monument.

Partnerships and Collaborative Relationships

The BLM jointly manages the Monument with the National Park Service. Monument staff also partner with numerous tribal, state, local, and non-governmental organizations on projects such as the Mt. Trumbull Ecosystem Restoration Project, the Mojave Desert Initiative, the Pakoon Springs Restoration project, Mojave Desert tortoise habitat restoration, and noxious weed treatments.

Business Practices

The Monument's total federal allocation for 2008 was \$2.18 million. This includes both BLM and National Park Service funding.

ARIZONA

IRONWOOD FOREST NATIONAL MONUMENT

Natural and Heritage Resources Conditions

Overall natural resource conditions at the Ironwood Forest National Monument (Monument) were stable in 2008. Nearly the entire Monument met land health standards; the exception was an area on the Agua Blanca allotment that has been affected by recreational shooting and OHV use. Approximately 54 non-native plant species occur on the Monument including buffelgrass, Sahara mustard, and Bermuda grass. A coordinated interagency effort is underway to reduce the buffelgrass infestation. BLM conducted sixty acres of rehabilitation efforts on the Monument.

Historic resource conditions varied from good to fair to declining. In the past five years, sites have been damaged by target shooting, natural erosion, and unauthorized roads related to illegal border activities.

Recreation Facilities, Roads, and Trails Conditions

The Monument has very minimal facilities. The condition of the Monument's recreation sites - which include parking turnouts and rustic campfire rings - was fair to good. Roads and trails throughout the Monument were in fair to poor condition. Drainage problems have damaged driving conditions through erosion. Monsoon rains in the summer of 2008 exacerbated this issue. One primary portal sign was replaced due to vandalism and six secondary portal signs were installed.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, approximately 17,200 individuals visited the Monument. The majority of BLM public contacts took place through field patrols, outreach at the community events, and volunteer events. BLM staff also worked with the Community Learning Adventure Service Project. This project brings a group of local high school students to the Monument to camp, remediate damages from undocumented immigration activities, and learn about the affects of illegal border activities on public lands. A variety of community groups, including Friends of the Ironwood Forest (FIF), organized cleanups throughout the year.

Science

The University of Arizona, Arizona Fish and Game Department, and USGS, among other partners, conducted a variety of research on the NCA in 2008. Projects included an investigation of the impact of road density on wildlife populations, a survey of Tucson shovel nosed snakes, a study of pollinator populations in the NCA, and a study of mountain lion populations at the wildland/urban interface.

Partnerships and Collaborative Relationships

In addition to organizing volunteer events and documenting illegal shooting activities, FIF is providing volunteers to accompany park rangers for weekend work. Due illegal border activities district policy requires that staff members be accompanied by another person at all times while out on the Monument. The BLM also partners with the U.S. Border Patrol and the Town of Marana on cleanup activities.

Business Practices

The Monument's total federal allocation for 2008 was \$468,629.

ARIZONA

LAS CIENEGAS NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

Overall natural resource conditions at Las Cienegas National Conservation Area (NCA) were stable and improving in 2008. Rangeland health evaluations have been completed for 93% of the NCA. All allotments assessed met standards. The majority of the NCA's riparian habitat was in proper functioning condition. The positive trend in upland and riparian areas was facilitated by maintenance of riparian fencing, adjustments to grazing management, and specific projects such as salt cedar removal and mesquite control. In partnership with the Arizona Game and Fish Department, reintroduction efforts are underway for native fish, frogs, and prairie dogs.

Efforts to stabilize and preserve the historic buildings and structures at the Empire Ranch Headquarters continued in 2008. The BLM partnered with the Empire Ranch Foundation on numerous historic preservation projects.

Recreation Facilities, Roads, and Trails Conditions

BLM facilities on the NCA were generally in fair condition. The two main access routes were in good condition and have been maintained annually. Most back roads were in poor, or at most fair, condition. Most buildings were in poor to fair condition. There is a significant backlog of deferred maintenance projects related to roads and historic buildings, administrative sites, and quarters. In 2008, work continued on the Heritage Discovery Trail, the Air Strip Group site and the Cieneguita Camp Area construction projects.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, approximately 23,000 individuals visited the NCA. The majority of visitors received information through maps, brochures, and web sites. Interpretive programs were offered on a limited basis during tours and events such as the Empire Ranch Roundup, Hohokam Middle School's Youth in the Wilderness Program, and the Empire Ranch Foundation's Wild about the Grasslands! Middle School Summer Camp. In 2008, approximately 5,800 volunteer hours were contributed by Empire Ranch Foundation members, Boy and Girl Scout troops, the Huachuca Hiking Club, and other local organizations. Volunteer projects included interpretation, historic structure preservation, and upland and riparian monitoring.

Science

Numerous research projects are ongoing at the NCA. In 2008, research partners included the University of Arizona, The Nature Conservancy, USDA, Arizona Fish and Game, Arizona Site Stewards, and Saint Louis University. Projects included studies of the influence of groundwater on riparian bird species, the effects of predation on survival of threatened and endangered aquatic invertebrates, beaver habitat suitability, cultural site monitoring, and developing affective strategies for incorporating native diversity into heavily invaded grasslands.

Partnerships and Collaborative Relationships

In addition to many minor partnerships, the BLM staff collaborate with several major partners to effectively manage the NCA. These include: the Empire Ranch Foundation, which works to protect, restore, and sustain the Empire Ranch; the Cienega Watershed Partnership, which coordinates and raises funds for the Sonoita Valley Planning Partnership and the Cienega Corridor Conservation Council; the Sonoita Crossroads Community Forum, which focuses on local growth and development issues; and Audubon's Appleton-Whittell Research Ranch, which focuses on management of the southern part of the NCA.

Business Practices

The NCA's total federal allocation for 2008 was \$1,147,437.

ARIZONA

SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

The condition of natural resources within the San Pedro Riparian National Conservation Area (NCA) was fair in 2008. A 10 mile river stretch within the NCA was assessed using the proper functioning condition protocol. Over four miles of this segment were found to be “functioning at risk” due to past riparian wildfire, less than expected width to depth ratios, and limited Fremont cottonwood and Goodding willow regeneration, among other factors. Only 2 of 13 possible native fish species inhabit the NCA. The majority of habitat is unsuitable for reintroduction due to water quality and quantity and exotic species. NCA staff worked to protect riparian and upland habitats by deterring unauthorized livestock grazing and OHV use.

The overall condition of heritage resources within the NCA varied greatly. Prehistoric resources were in stable condition, while the majority of historic resources that have not been stabilized were in very poor condition. The 7% of sites that have been stabilized are in fair condition. Sites that have been restored or are in the process of being restored, including the San Pedro House and the Fairbank Schoolhouse, are in excellent condition.

Recreation Facilities, Roads, and Trails Conditions

The condition of the NCA’s recreation facilities, roads, and trails was fair to adequate. Regular, but minimal, maintenance is completed each year on the NCA’s recreation sites and trailheads. The majority of NCA roads are open only for authorized or emergency usage. The overall condition of roads was poor to adequate. Trail maintenance is carried out once to twice a year on the most used trails. The overall condition of the trail system was fair. During 2008, relocation and construction of the Hereford Bridge parking lot/trailhead was completed, as was construction of the Miller Backcountry Camping Area.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, approximately 113,325 individuals visited the NCA. The BLM and the Friends of the San Pedro River (FSPR) jointly run the San Pedro House Bookstore and Information Center and the Fairbank School House Museum and Information Center. The FSPR provided 162 educational events in 2008, including guided walks, school programs, and equestrian rides. In 2008, the FSPR contributed 11,697 hours of volunteer time at a value of about \$219,552.

Science

There are approximately 15 ongoing research projects being conducted in the NCA. Projects include the development of a habitat model to predict breeding bird presence, an investigation into the ecology of molt-migrant birds, an analysis of beaver genetics, and an assessment of the impacts of ground water withdrawal on avian populations. There is also ongoing monitoring of upland and riparian vegetation, avian populations, threatened and endangered species, hydrology, and reintroduced beavers.

Partnerships and Collaborative Relationships

The FSPR provides numerous services for the NCA. These include staffing visitor contact points, providing education programs, and contributing to various volunteer efforts. The BLM is a key member of the Upper San Pedro Partnership, a consortium of federal, state, local, and private agencies established to coordinate policies and projects to meet water needs in the Sierra Vista Subwatershed. The BLM also cooperates with the Huachuca Audubon Society, the Nature Conservancy, the Arizona Archaeological Society, the Daughters of the American Revolution, and the Curry Draw Working Group.

Business Practices

The NCA’s total federal allocation for 2008 was \$1,801,854.

ARIZONA

SONORAN DESERT NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, the condition of Sonoran Desert National Monument's (Monument) natural resources varied greatly, though most were in good condition. Damage was caused by illegal border-related activities, long-term drought, and inappropriate recreation. In response to inappropriate recreation, the BLM initiated the Butterfield Project in 2008. This project closed 88 miles of roads, rehabilitated damaged areas, and developed a plan to avoid future damage. Youth crews restored illegal vehicle routes, cleaned up target shooting sites, removed dumps, repaired barrier fences, and removed weeds. Land health assessments and grazing compatibility determinations are ongoing. In 2009, 230,000 acres of the Monument will be closed to grazing.

Based on limited inventories, cultural resource conditions appeared stable. Arizona State Park Site Stewards and BLM staff monitored 20 sites within the Monument in 2008. Restoration and protection of several cultural resource sites were undertaken.

Recreation Facilities, Roads, and Trails Conditions

The general condition of the recreation facilities on the Monument was good. The Monument encompasses about 480 miles of unmaintained primitive roads which are generally in a drivable condition. Fifteen miles of the most-used road were maintained during the summer of 2008. Eleven miles of trail were maintained by Southwest Conservation Corps crews. Damaged wilderness trailhead signs were replaced in seven locations and two Monument portal signs were replaced. The Monument has no approved sign plan at this time. In 2008, temporary kiosks, fencing, posts, and signs were installed as part of the Butterfield Project.

Outreach, Environmental Education, Interpretation, and Volunteers

An estimated 34,349 individuals visited the Monument in 2008. Monument staff provided 38 on- and off-site educational presentations. They also conducted significant outreach related to the Butterfield Project. A second Monument ranger was hired to build visitor contact and land restoration capacity. Signs and Kiosks provided interpretation and user ethics information. Volunteers provided invaluable services to the Monument in 2008. One volunteer spent 75 hours inspecting and cleaning restrooms, maintaining visitor records, completing general maintenance and dispersed clean-up, and patrolling sensitive areas. The Arizona Site Steward Program assisted in monitoring 20 sites.

Science

Research on the Monument was diverse, ranging in focus from air quality to wildlife to recreation. Findings from an ongoing study to assess recreation impacts and user behavior were a significant factor in initiating the Butterfield Project. Other research included an urban growth and air pollution study, floristic studies, and research on desert-landscape restoration practices. The cessation of grazing south of Interstate 8 in 2009 will provide an opportunity to assess the effects of livestock removal on vegetation and wildlife.

Partnerships and Collaborative Relationships

The Monument does not have a friends group, although in 2008 several groups discussed creating one. In 2008, partnerships were initiated to map and remove invasive species. Monument staff also worked closely with the interested public and other agency representatives to interpret, identify, assess, and mark the Juan Bautista de Anza National Historic Trail.

Business Practices

The Monument's total federal allocation in 2008 was \$813,547.

ARIZONA

VERMILLION CLIFFS NATIONAL MONUMENT

Natural and Heritage Resources Conditions

Monitoring and rangeland health evaluations indicate that 57% of key areas within Northern Arizona's Vermillion Cliffs National Monument (Monument) are static or improving. This percentage may underestimate conditions, since species frequency data for many key areas were not collected during the past four years of above-average precipitation. Four of five grazing allotments were assessed and met rangeland health standards. In 2008, the Monument commenced a partnership with the Grand Canyon Trust to remove tamarisk and Russian olive from Paria Canyon. Six condors were released at the monument in 2008 as part of an ongoing effort to rebuild Arizona's California condor population.

Partners monitored 14 heritage resource sites and conducted cultural resource inventories on 1,200 acres of land. A paucity of cultural resource inventories makes it difficult to assess the status of heritage resources with much accuracy. In general, conditions appear stable with only minor adverse impacts related to vandalism, erosion, and weathering.

Recreation Facilities, Roads, and Trails Conditions

The BLM maintains only one major public road within the Monument. The road was in good condition. One of the three roads accessing the interior Monument was repaired and rerouted around the West Bench Pueblo cultural resource site. Four interpretive panels were added to the California Condor Site. Vandals used crayons to mark the trail to the wave rock formation; all marks were removed by Monument staff.

Outreach, Environmental Education, Interpretation, and Volunteers

An estimated 48,000 individuals visited the Monument in 2008. The majority of public contacts made are related to the Paria Canyon – Coyote Buttes special use areas; this area's website is the BLM's most frequently viewed site. Monument staff made an educational presentation to 80 individuals attending the 2008 condor release event. Educational programs were carried out by the Arizona Strip Interpretive Association and the Grand Circle Field School.

Science

The condor reintroduction program has been ongoing since 1996. The Peregrine Fund conducts condor releases and daily monitoring. Partners in this research include Arizona Game and Fish Department, U.S. Fish and Wildlife Service, Grand Canyon National Park, Utah Division of Wildlife Resources, Kaibab National Forest, and the BLM. Northern Arizona University is conducting ongoing research on recreational impacts on cultural and natural resources. Results of this research are used to set and/or adjust visitor use limits.

Partnerships and Collaborative Relationships

The Paria Canyon – Coyote Buttes Special Management Area is jointly managed by Vermilion Cliffs National Monument, the Bureau's Kanab Field Office, and Grand Staircase – Escalante National Monument. Other partners are Glen Canyon National Recreation Area, Northern Arizona University, and the National Weather Service. The Arizona Strip Interpretive Association operates an Interagency Visitor Center and hosts environmental education programs; answers questions about the local area; and issues mineral, woodcutting, and Christmas tree permits. Partnerships with the Arizona Site Steward Program and the Kaibab-Vermilion Cliffs Heritage Alliance facilitated inventory and monitoring of cultural resource sites. A partnership with the Grand Canyon Trust addressed weed issues in Paria Canyon.

Business Practices

The Monument's total federal allocation in 2008 was \$ 552,814.

CALIFORNIA

CALIFORNIA COASTAL NATIONAL MONUMENT

Natural and Heritage Resources Conditions

The condition of the California Coastal National Monument's (Monument) natural and heritage resources appeared relatively stable in 2008. The 20,000 offshore rocks and small islands comprising the unit were impacted by factors such as the current, the annual ocean upwelling, and ocean health. Protocols for collecting baseline offshore habitat data are needed before natural and heritage resource conditions can be appropriately assessed. BLM staff continue to compile data for the Monument's site characterization study and survey.

While the BLM has not conducted restoration efforts within this area, U.S. Fish and Wildlife has an ongoing seabird restoration project addressing portions of the Monument.

Recreation Facilities, Roads, and Trails Conditions

The Monument does not have any recreational facilities, roads, or trails. BLM staff intend to develop a sign plan once the Monument's integrated Communication Plan and Business Plan are complete.

Outreach, Environmental Education, Interpretation, and Volunteers

The Monument has no visitor center, but conducts extensive outreach through its gateway communities and website. Informational kiosks have been installed in five gateway communities. Brochures on the Monument and two of the gateway communities are available on the Monument's website. In 2008, the Monument prioritized planning, development, and implementation of the California Coast Geotourism Project. This project, on which BLM is partnering with the National Geographic Society, emphasizes tourism that sustains or enhances the geographical character of the California coast, including its environment, culture, aesthetics, and heritage. In 2008, a total of 944 volunteer hours and 2034 donated hours were contributed to the Monument (donated hours are those preformed by members of formal partnerships).

Science

Seabird monitoring by the Sea Ranch Association's California Coastal National Monument Task Force was the major science initiative associated with the Monument in 2008. Much of this work was carried out by citizen scientists. The Mendocino Coast and Madrone Audubon societies collected and analyzed seabird data from Gualala Point Island. In 2008, a botanist from College of the Redwood conducted initial research into rare terrestrial plant hotspots on Monument rocks and seastacks along the Mendocino County coast.

Partnerships and Collaborative Relationships

Partnerships are essential to the effective management of the Monument. Partners fall into three categories: core-managing partners responsible for collaborating on the overall management of the Monument; collaborative partners engaged in programs; and stewards responsible for a portion of the coast adjoining the Monument. In addition, the Monument has 12 gateway partnerships in various stages of development. The BLM's core-managing partners are California Department of Fish and Game and California State Parks. Collaborative partners and stewards include: the Yurok Tribe, U.S. Fish and Wildlife Service, U.S. Coast Guard, Monterey Bay National Marine Sanctuary, Recreation Fishing Alliance, Trinidad Museum Society, and the Sea Ranch Association.

Business Practices

The Monument's total federal allocation in 2008 was \$282,000.

CALIFORNIA

CARRIZO PLAIN NATIONAL MONUMENT

Natural and Heritage Resources Conditions

Overall natural resource conditions at the Carrizo Plain National Monument (Monument) were positive in 2008. However, increased off-road vehicle activity resulted in habitat degradation. All seven grazing allotments within the Monument have been assessed and are meeting rangeland health standards. Acres of yellow star thistle were reduced from 250 to 3 as part of ongoing noxious weed removal. One hundred acres of the Monument were seeded with native seed. Seven miles of fencing were modified for easier wildlife movement.

The Monument's overall heritage resource conditions were stable in 2008. An effort to designate sites within the Monument as National Historic Landmarks is in its final stages. In 2008, rehabilitation of the Selby Ranch Cow Camp Barn, a National Register property, was completed. For the 16th year, the BLM partnered with the South Sierra Archaeological Society to monitor 31 cultural sites on the Monument.

Recreation Facilities, Roads, and Trails Conditions

The Monument's facilities continued to be in good condition. In 2008, the Selby campground was improved by upgrading tables, installing horse corrals, planting vegetation, and delineating campsites. The major roads within the Monument are county-maintained, though the BLM performs some seasonal repair and grading. Many directional signs were replaced this year due to fading and vandalism. Vandalized kiosks were also replaced.

Outreach, Environmental Education, Interpretation, and Volunteers

An estimated 30,000 to 50,000 individuals visit the Monument annually. Approximately 4,000 to 8,000 pass through the visitor center. The visitor center is staffed by BLM employees, volunteers, interns, and members of the Friends of the Carrizo. In 2008, Bureau staff hosted or participated in 82 programs and events related to the Monument. Over 1,000 visitors participated in Painted Rock interpretive tours. Volunteers spent a recorded 4,493 hours leading interpretive tours, monitoring cultural sites and species, and renovating a campground.

Science

Numerous research and monitoring projects are ongoing at the Monument. Topics include the relationship of native rodents with invasive plants, the impact of grazing on native grassland, the ecology and distribution of the sphinx moth, and the use of satellite imagery to map and model giant kangaroo rat habitat. A Monument Scientific Review Team was recently created to review future research proposals.

Partnerships and Collaborative Relationships

Friends of the Carrizo continued to support the Monument through outreach, interpretive work, and volunteer and workday organization. Monument employees worked closely with the Nature Conservancy and the California Department of Fish and Game, which assisted with the Monument's acquisition and research programs. The Monument's active Native American Council provided advice on the protection of cultural sites. Gateway signs were installed at the Taft Chamber of Commerce. Taft is also planning to establish an offsite Monument visitor center. The Monument Advisory Committee has been intimately involved in developing the Monument's resource management plan.

Business Practices

The Monument's total federal allocation for 2008 was \$1,550,000.

CALIFORNIA

HEADWATERS FOREST RESERVE

Natural and Heritage Resources Conditions

Overall forest conditions at Headwaters Forest Reserve (Reserve) vary due to its mixed management history. Approximately 3,088 acres of the Reserve encompass undisturbed, old-growth forest. The remaining 4,384 acres are in younger seral stages as a result of timber harvesting prior to public acquisition. IN 2008, efforts continued to accelerate the restoration of old-growth characteristics through thinning dense, young stands and reforesting watershed restoration sites. Invasive weed removal occurred at the north end of the Reserve. The conditions of the Reserve's wildlife resources were generally stable with the exception of northern spotted owls.

The overall condition of cultural and heritage resources remained stable, but increased visitation has led to more collection, disturbance, and looting of artifacts and structural remains.

Recreation Facilities, Roads, and Trails Conditions

There are relatively few facilities within the Reserve. There are approximately three miles of BLM-maintained roads, nine miles of maintained trails, and two trailheads with parking areas, signs, and three vault toilets. Due to adverse geological conditions and heavy winter rains the roads and trails had very high maintenance requirements. In 2008, the parking lots were redesigned and resurfaced, a large culvert and failing bridge were removed, a new bridge was installed, and six culverts were replaced. The historic train barn was disassembled and rebuilt in a new site; the converted building will be the new Headwaters Education Center. In cooperation with the California Conservation Corps approximately 3/4 mile of new trail was constructed.

Outreach, Environmental Education, Interpretation, and Volunteers

Approximately 10,300 people visited the Reserve in 2008. Guided tours reached 400 people and 413 students were presented within slide shows at local schools. Reserve staff developed an interpretive prospectus for the new Headwaters Education Center; a public workshop was held to gather input on the prospectus. A total of 1,373 volunteer hours were recorded in association with the train barn conversion, most from students at Colorado Mountain College and College of the Redwoods. Volunteers from Humboldt State University donated approximately 268 hours at three cultural excavation sites. Reserve staff initiated a newsletter which was sent to 389 interested parties.

Science

Science research projects included: watershed sediment delivery analysis, geologic and paleontological mapping, fire history, preliminary research on the prehistoric use of the Reserve's upland environment, and numerous wildlife and plant community monitoring efforts.

Partnerships and Collaborative Relationships

The Reserve is co-managed by the California Department of Fish and Game. Reserve staff partnered with the Pacific Coast Fish, Wildlife, and Wetlands Restoration Association on watershed-wide restoration. For the ninth year, the Salmon Creek watershed was the focus of restoration efforts. Humboldt Bay National Wildlife Refuge and Green Diamond Resource Company, both downstream of the Reserve, conducted concurrent restoration activities. The BLM is a member of the North Coast Forest Restoration Cooperative, a multi-agency working group engaging universities, non-profit organizations, and federal, state, and local agencies. Government-to-government consultation with local tribes continued concerning native cultural sites and landscapes.

Business Practices

The Reserve's total federal allocation for 2008 was \$1,789,000.

CALIFORNIA

KING RANGE NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

All 11,100 rangeland acres within the King Range National Conservation Area (NCA) have been assessed; 80% of these acres meet rangeland health standards. A 2008 lightning storm triggered a fire on the NCA's Paradise Ridge. Prairies impacted by fire suppression equipment were planted with perennial grass and mulched with rice straw in the fall. With the assistance of Student Conservation Association Interns, the Mattole Restoration Council, and volunteers, NCA staff continued extensive invasive weed monitoring and removal efforts.

Archaeological site monitoring was completed along the NCA's Lost Coast Trail. Most sites were in stable condition, with erosion presenting a problem at a few sites. No vandalism was noted. Emergency excavation and reburial of eroding human remains was conducted in consultation with the Bear River Band of the Rohnerville Rancheria.

Recreation Facilities, Roads, and Trails Conditions

The NCA's campgrounds and recreation sites received regular maintenance. With the exception of one campground scheduled for deferred maintenance, all facilities were in good to excellent condition. Maintenance was accomplished on thirty miles of road. Forty miles of trails within the King Range Wilderness were maintained by NCA staff, an American Hiking Society Volunteer Vacations group, a Student Conservation Association Wild Corps crew, and California Conservation Corps crews. The highly-praised Paradise Royale Mountain Bike Trail was dedicated in 2008.

Outreach, Environmental Education, Interpretation, and Volunteers

The NCA Project Office and Visitor Center, which offers an array of informational resources, received 2,180 visitors in 2008. A BLM interpretive specialist collaborated with the Mattole Restoration Council education coordinator on 11 classroom presentations and 10 class field trips. The interpretive specialist also led 7 hikes. Volunteers contributed 10,524 hours to the NCA, working on projects including: mountain bike trail construction, wilderness restoration, invasive weed removal, and plankton monitoring. A total of 3,376 people backpacked in the King Range Wilderness.

Science

In 2008, the BLM participated in the ninth year of cooperative research with USGS California Cooperative Fisheries Research Unit, Humboldt State University, and National Marine Fisheries Service Southwest Science Center on the fish and stream processes of streams within the Lost Coast watershed. Other research projects included phytoplankton monitoring, Pacific salmon monitoring, tide pool monitoring, and native bunchgrass restoration.

Partnerships and Collaborative Relationships

In 2008, the NCA partnered with many non-governmental organizations, tribal, federal, state, and county agencies, educational institutions, and special interest groups. Partners worked on numerous projects, including resource monitoring, trail construction, visitor surveys, historic structure restoration, and visitor tours.

Business Practices

The NCA's total federal allocation for 2008 was \$966,000.

CALIFORNIA

PIEDRAS BLANCAS LIGHT STATION OUTSTANDING NATURAL AREA

Natural and Heritage Resources Conditions

The overall condition of natural resources at Piedras Blancas Light Station Outstanding Natural Area (ONA) continued to improve. In 2008, all of the ONA's 19 acres were treated to eliminate invasive ice plant and 13 acres of native vegetation were restored. One outcome of this effort was the recovery of the local population of native compact cobwebby thistle. When the BLM acquired the property in 2001 only one cobwebby thistle plant remained; a 2008 survey revealed over 1500. Native animals are also returning. Black-tailed deer have not been sighted on Point Piedras Blancas for more than twenty years, but are now frequently seen by visitors.

Restoration progressed for several structures listed on the National Historic Register. However, major restoration work is still needed. In 2008, restoration of the historic Fuel and Storage building began; the building will be used as a visitor center and gift shop.

Recreation Facilities, Roads, and Trails Conditions

The ONA's road system was in decent shape. However, the entrance road traversing CA State Park property was in substandard condition. The development of a potable water system for the ONA is a top priority. A boardwalk, constructed of recycled materials and designed to protect a pre-historic shell midden, was completed in 2008. A new ½ mile ADA interpretive trail is nearly complete. A new information kiosk was also installed. The parking areas were re-graveled and compacted.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, the ONA saw a dramatic increase in interpretation, visitor services, and volunteer support. A ceremony, attended by 250 visitors, was held to celebrate the area's addition to the National Landscape Conservation System as an ONA. Tours of the light station and surrounding grounds increased from 2 to 12 a month. Annual visitation through these regular tours and special events exceeded 4000 participants, including 20 local school and youth groups. Twelve new exhibits were established within the historic buildings and along the interpretive trail. Volunteers contributed over 10,000 hours of resource management, visitor services, maintenance, and administrative assistance.

Science

The ONA continues to be an important research location. The BLM provides logistical support for compatible research that enhances knowledge of the coastal environment. Research topics include: intertidal population dynamics, seismic movement/plate tectonics, Pacific jet-stream weather, and censuses of California grey whale calves, California sea otters, and northern elephant seals,

Partnerships and Collaborative Relationships

Neighboring communities were essential to the success of the ONA in 2008. Local volunteers have formed a dedicated work group responsible for activities such as interpretive tours, non-native plant eradication, landscaping, minor maintenance, and administrative support. In 2008, the Piedras Blancas Light Station Association hired an executive director, began a membership drive, and opened a gift shop to raise funds for light station restoration. ONA staff also partner with several other private and government entities on the operation and restoration of the light station.

Business Practices

The ONA's total expenditures for labor and project work in 2008 were \$185,100.

CALIFORNIA

SANTA ROSA AND SAN JACINTO MOUNTAINS NATIONAL MONUMENT

Natural and Heritage Resources Conditions

The overall condition of natural resources at Santa Rosa and San Jacinto Mountains National Monument (Monument) remained good to excellent. In 2008, 10,000 acres were inventoried for wildlife habitat and 50 acres were inventoried for noxious weeds. Multiple partners removed tamarisk from areas within the Monument. In late 2008, the Coachella Valley Multiple Species Habitat Conservation Plan was approved, which will enhance protection of the Monument's special status species. Graffiti is regularly removed by staff and partners from rocks along California Highway 74.

The overall condition of heritage resources remained good to excellent. OHV-related impacts to heritage resources have continued in an isolated area near Martinez Canyon. Regulatory signs and increased law enforcement have reduced these incursions.

Recreation Facilities, Roads, and Trails Conditions

The condition of the Monument's recreation facilities remained fair to excellent. Torrential rains caused substantial damage to trails at lower elevations within the Monument. The Friends of the Desert Mountains worked to establish a trained volunteer trail rehabilitation crew. Numerous facilities improvements were made in 2008, including: replacement of viewing deck at Cahuilla Tewanet Vista Point, refurbishing of the Santa Rosa Spring Campground, and installation of solar panels at the visitor center.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, the visitor center received over 10,000 visitors and added several new interpretive displays, including a 3-D relief model of the Monument. More than 160 interpretive programs were delivered to over 12,000 individuals in 2008, including 880 elementary students. Volunteers contributed over 1,600 hours to support a variety of programs. A new brochure and trail map for the Monument resulted from the collaboration of numerous partners. Monument staff also collaborated with Southern California Edison and Friends of the Desert Mountains on the *Field Guide to the Santa Rosa & San Jacinto Mountains National Monument*.

Science

The Boyd Deep Canyon Desert Research Center, a unit of the University of California's Natural Reserve System, is the Monument's premiere research facility. Research topics pursued at the Center include: population biology of the Coachella Valley fringe-toed lizard; health and demography of the Peninsular bighorn sheep; mountain lion ecology; rattlesnake ecology; physiology of succulents; hybridization of quail species; and the response of California's ecosystems to environmental change.

Partnerships and Collaborative Relationships

The Monument is co-managed by the BLM and the US Forest Service. Friends of the Desert Mountains is the Monument's primary nonprofit support organization. In 2008, the Friends group dramatically increased program development and volunteer recruitment/management. Numerous other partnerships and collaborative relationships exist with tribal, federal, state, and county agencies, non-profit organizations, interest groups, and local businesses.

Business Practices

The Monument's total federal allocation for 2008 was \$1,079,000.

COLORADO

CANYONS OF THE ANCIENTS NATIONAL MONUMENT

Natural and Heritage Resources Conditions

The Canyons of the Ancients National Monument (Monument) has the highest density of cultural resources in the US. Eighteen percent of the Monument has been surveyed for cultural resources. In 2008, 96 monitored sites were stable and two were deteriorating. Monument staff and partners continued extensive artifact curation. Staff also spent substantial time reviewing two proposals for fluid mineral development close to, or directly impacting, cultural resources.

The condition of natural resources was affected by long term drought, fire, and use. A 2008 evaluation showed that 25 of 28 grazing allotments did not meet rangeland health standards. Livestock grazing was a significant factor for not meeting standards in 17 of the 25 allotments. Work to inventory and treat weeds is ongoing. A cheatgrass treatment was unsuccessful, but 397 acres of tamarisk were successfully treated in 2008. While the Monument was not historically elk habitat, numbers of elk are increasing exponentially. Approximately 40 acres of hazardous fuels reduction was completed in 2008 at Lowry Pueblo.

Recreation Facilities, Roads, and Trails Conditions

The Anasazi Heritage Center, which is the Monument's jumping off point and houses 3.6 million artifacts, has maintenance needs which are being addressed through deferred maintenance funds. Lowry Pueblo is in generally good condition though its exposed standing walls and Great Kiva require stabilization. The Monument has 43 miles of BLM roads for which maintenance has halted pending Section 106 compliance and SHPO consultation. User-made trails are a continual challenge around cultural resource sites.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, 45,000 individuals visited the Monument; 23,560 visited the Heritage Center. The Heritage Center, which features numerous exhibits and educational programs, celebrated its 20th anniversary. This anniversary year saw the completion of the first phase of the Heritage Center's main gallery redesign and the installation of two new interactive computer stations. In 2008, Monument and Heritage Center staff and volunteers provided 96 K-12 presentations, 11 college presentations, 22 public presentations, 6 site tours, and 68 curation tours. Numerous volunteer projects were conducted on the Monument and at the Center, with a total of 267 volunteers contributing 13,542 hours. Victoria Atkins, the Monument Supervisory Interpretive Specialist, received BLM's Excellence in Environmental Education and Interpretation Award.

Science

While wildlife and geological studies are conducted at the Monument, the research focus is on the area's rich archeological resources. In 2008, field work was completed on a cultural resource inventory in the Cross Canyon WSA; scientists determined chemical content of pigments on ceramics and painted plaster from Lowry Pueblo; an archeologist led Elderhostel volunteers in inventorying 40 acres and recording three sites; and the National Science Foundation funded an ongoing computer simulation designed to elucidate village formation and depopulation in the Mesa Verde region between A.D. 600 and A.D. 1300.

Partnerships and Collaborative Relationships

In 2008, the Monument and the Heritage Center coordinated and/or consulted with over 60 partners and stakeholders. The Conservation System Alliance awarded Monument Manager LouAnn Jacobson with the 2008 National Landscape Conservation System Leadership Award.

Business Practices

The Monument's total federal allocation for 2008 was \$1,545,000.

COLORADO

GUNNISON GORGE NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

According to a 2001 land health assessment, approximately 89 percent of the Gunnison Gorge National Conservation Area (NCA) meets land health standards. Since that time, upland and riparian conditions have generally remained stable with some riparian improvement due to new camping regulations and invasive and noxious weed treatment. In 2008, 900 cottonwood poles and 2,500 sandbar willow cuttings were planted along the Gunnison River. High water and beavers destroyed or caused damage to the majority of these plantings. Above-average snow depth in 2008 caused the emergency closure of the Gunnison Sage Grouse ACEC to reduce impacts to big game and sage grouse. A fence was completed to protect the Fairview Native Plant ACEC from motor vehicle use.

Cultural resource conditions were stable with little new vandalism or erosion. In 2008, NCA staff excavated a rock art panel and built a fence to reduce impacts from sheep and vandalism.

Recreation Facilities, Roads, and Trails Conditions

The NCA maintains four major entrance sites and 16 developed recreation sites. These facilities were in fair to good condition. The NCA also has over 60 dispersed campsites, access areas, and overlooks. Vandalism to facilities continued to be a problem. The NCA has over 65 miles of designated roads and 100 miles of designated trails. Illegal OHV routes continue to be a problem; this is exacerbated by the misidentification of sheep trails as OHV routes. Wooden signs were replaced with steel signs to reduce theft and vandalism. In 2008, a new trail, campground, boat launch, and fishing pier were constructed within the NCA.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, approximately 90,000 individuals visited the NCA; about 20% visited the Montrose Public Lands Center, which is jointly run by BLM, USFS, and NPS. Most visitor contacts were made in the field by BLM law enforcement personnel, river rangers, and visitor services and maintenance personnel. A 2008 Government Performance Results Act survey found a visitor satisfaction rate of 96%. The NCA's OHV Crew, which is made up of local teachers, provided 15 education classes for students and adults. NCA river rangers conducted day and overnight Take It Outside river trips. Over 350 volunteers contributed 4,162 hours of work on NCA projects. Hosted workers from Delta Corrections Center added another 2,920 hours of work.

Science

The NCA hosted numerous science research projects in 2008, including: inventory and excavation of a rock art site by Western Wyoming College students; analysis by USGS of the effect of traffic on elk migration and sage grouse habitat; a study by Northern Arizona University on human impacts in the Wilderness; a bat survey; and inventory and documentation by a GeoCorps intern of erosion and invasive weeds at over 900 salinity control check dams. The five year USGS Mancos Shale Landscapes Project was completed in 2008.

Partnerships and Collaborative Relationships

NCA staff engaged in several key partnerships in 2008. The Colorado Division of Wildlife helped monitor snow depths, conduct hunting and fishing patrols, implement Gunnison Sage Grouse ACEC closure, and assist in BLM's North Rim Landscape Strategy workgroup. The NCA also continued to work with Colorado State Parks on OHV issues and user education projects. Members of the Gunnison Gorge Friends Network contributed over 3,000 hours on stewardship, outreach, resource protection and restoration projects in the NCA in 2008.

Business Practices

In 2008, the total federal allocation for the NCA was \$817,798.

COLORADO

MCINNIS CANYONS NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

Land health assessments have been conducted on 112,300 acres of the 123,430 acre McInnis Canyons National Conservation Area (NCA). When surveyed five years ago, 89% of acres assessed met standards, while 11% did not. In 2007, additional land health assessments showed that standards were still not being universally met. There were, however, positive indicators such as increased perennial plant cover and density. Where standards were not met, factors included historical livestock grazing, large wildfires, noxious and invasive plants, and current grazing management. The BLM is continuing to modify grazing management and undertaking extensive invasive plant treatment along the Colorado River corridor.

A 2008 survey of a heavily visited area uncovered several new heritage sites within the NCA. Known archaeological sites in the NCA continued to be used as outdoor classrooms, with educational hikes conducted to rock art in the McDonald Creek Cultural Area and a sheltered camp on the Rabbit Ears trail.

Recreation Facilities, Roads, and Trails Conditions

The NCA maintained 28 recreation sites in fair to good condition. In 2008, plans were developed for several new facilities within the NCA, including a new trail head and a new parking area. The NCA has more than 80 miles of designated roads and 120 miles of designated trails. Annual road maintenance meets basic user needs. Trail construction and maintenance, for which the BLM relies wholly on volunteers, do not meet current needs. To address this issue, NCA staff sought outside grant funding for trail crews.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, 284,136 individuals visited the NCA. During summer weekends, the river ranger contacted more than 350 visitors in the Colorado River corridor per day. During the spring and fall, park rangers contacted hundreds of people daily on mountain bike trails and motorized use areas. With the addition of a third park ranger in 2008, NCA staff were able to maximize educational contacts on busy weekends. NCA staff worked with the Colorado Welcome Center, Grand Junction Visitor, and Convention Bureau to provide information to area visitors. The NCA partnered with the Museum of Western Colorado (MWC) to provide environmental education opportunities to local youth. The MWC and BLM partnered on a "Take it Outside" program during which 42 local at-risk youth spent three days on a dinosaur discovery adventure. Volunteers contributed more than 1,200 hours of service at the NCA in 2008.

Science

The NCA's significant paleontological resources are being studied primarily through a partnership with the MWC. In 2008, students from a Mesa State College Ecological Restoration course developed a rehabilitation plan for one of the NCA's more heavily impacted areas.

Partnerships and Collaborative Relationships

The NCA participates in numerous partnerships and collaborative relationships. Significant partners include: Friends of McInnis Canyons, members of which donated 301 volunteer hours in 2008; the Tamarisk Coalition, which provides technical assistance and coordination for restoration of riparian lands; the Colorado Environmental Coalition, members of which spent more than 250 hours on trail maintenance and restoration; the Colorado Division of Wildlife, which cooperatively manages several NCA resources; and the Grand Valley Mountain Bike Patrol, members of which spent more than 224 hours patrolling the NCA's mountain bike trails.

Business Practices

In 2008, the total federal allocation for the NCA was \$618,500.

FLORIDA

JUPITER INLET LIGHTHOUSE OUTSTANDING NATURAL AREA

Natural and Heritage Resources Conditions

Jupiter Inlet Lighthouse Outstanding Natural Area (ONA) has retained many of the ecological resources now rare along the urbanized coast of southeastern Florida, including one of the largest and most intact scrub remnants in the county (less than 3% of the original scrub remains). Jupiter Inlet is also one of the county's most diverse natural areas, and hosts 18 special status species, including four federally listed species. Invasive plant species and an overly mature sand pine forest suppressed the rarer scrub endemics. Restoration efforts, combined with prescribed burns and the 2004 hurricanes, have helped to renovate the scrub habitat. The heritage resources are in good condition.

Recreation Facilities, Roads, and Trails Conditions

BLM does not currently administer any formal recreation facilities at the ONA. The need for public access and interpretive facilities is being addressed in the current activity planning effort. Currently, fire break roads serve as public access trails. A formal trail plan is being developed. Additional trail segments are expected to include ADA access to the tidal wetlands and interface with tours of the lighthouse.

Outreach, Environmental Education, Interpretation, and Volunteers

A designated Hand on the Land site, the ONA serves as an outdoor classroom for the Jupiter High School Environmental Research and Field Studies Academy. Students develop their field skills by completing projects at the ONA, such as removing exotic plants and mapping gopher tortoise and burrows. The Loxahatchee River Historical Society maintains an active docent program and museum on site, serving as the primary interface for lighthouse visitors and providing regionally recognized interpretive programs.

Science

Past research projects included genetic sampling and hand pollination of the endangered four-petal pawpaw. A state-wide program monitors the ONA to assess steep declines in the federally threatened Florida Scrub Jay.

Partnerships and Collaborative Relationships

The ONA's establishment institutionalized long-standing collaborative partnerships at Jupiter Inlet. Partners include the U.S. Coast Guard, Palm Beach County, Town of Jupiter, Village of Tequesta, the Loxahatchee River Historical Society, and the Jupiter High School. The Loxahatchee River Historical Society, while not formally designated as a Friends Group, in many ways acts in that capacity.

Business Practices

Designated on May 8, 2008, the ONA was not funded as a NLCS unit in 2008. However, a total of \$271,518 was expended onsite after the unit was designated.

IDAHO

CRATERS OF THE MOON NATIONAL MONUMENT

Natural and Heritage Resources Conditions

The Craters of the Moon National Monument and Preserve (CMNM) in southeastern Idaho contains over 750,000 acres of lava flows, rift zones, and other volcanic formations. The BLM and National Park Service (NPS) jointly manage the CMNM, with the BLM managing 275,000 acres. Numerous wildfires have occurred over the last four years resulting in some significant changes to vegetation and preventing much of the landscape from returning to key sage grouse or late seral sagebrush steppe habitat. Because of fire activity, a number of grazing allotments have been, or will be, closed for 1-2 years. Noxious weeds are continually treated in the CMNM. All 16 archaeological sites within the CMNM are in stable condition.

Recreation Facilities, Roads, and Trail Conditions

Facilities on the BLM portion of the CMNM are limited to roads and access point kiosks. The BLM and NPS continued working on a comprehensive travel and transportation management plan for the CMNM, which will classify over 600 miles of roads, primitive roads, and trails.

Outreach, Environmental Education, Interpretation, and Volunteers

The visitor center is a NPS facility. A key management objective is to focus visitor experience on the NPS-managed lands and facilities. Visitor experience on BLM lands within the CMNM is largely self-guided. Contact with the visiting and local public occurs through websites, informational kiosks, workshops, and educational.

Science

The following research and monitoring projects were conducted in 2008: investigation of the use of native annual plant species to suppress weedy invasive species in post-fire habitats; study of historic ranching; inventory of lava flows; tracking pronghorn migration in and around the CMNM; mapping vegetation; developing monitoring protocols for sagebrush steppe, aspen and water quality; pika surveys; documenting vascular flora; surveying nonvascular plants; and monitoring air quality.

Partnerships and Collaborative Relationships

As noted above, NPS and BLM jointly manage the CMNM. Various national and local chapters of nonprofit organizations collaborate with the BLM on CMNM-related projects, including the Wilderness Society, the Idaho Conservation League, Snake River Audubon Society, Gem State Grotto, and Silver Sage Grotto. Some examples of local and state government partners include Idaho Department of Fish and Game, Blaine County Sheriff's Office, and the Minidoka County and Blaine County Highway Districts.

Business Practices

In 2008, the total federal allocation for the BLM-managed section of the CMNM was \$1,384,000.

IDAHO

SNAKE RIVER BIRDS OF PREY NATIONAL CONSERVATION AREA

Natural and Heritage Resource Conditions

Idaho's Snake River Birds of Prey National Conservation Area (NCA) encompasses nearly 485,000 acres and is home to North America's largest concentration of nesting raptors. In 2008, ecological trends in the NCA were generally static or negative due to the combined effects of OHV use, military training, livestock grazing, and wildfires. The NCA is also heavily infested with invasive species. Noxious weeds on the NCA generally occur in small, isolated populations and are treated as quickly as possible. OHV use is increasingly impacting heritage resources.

Recreation Facilities, Roads, and Trails Conditions

Most recreational activity in the NCA was dispersed. A number of unimproved sites received significant use. Developed recreation sites received annual maintenance and were in good condition. Generally, roads receive maintenance once a year in the spring. The NCA does not have a public contact facility, but provides public information about the NCA at the Kuna Chamber of Commerce visitor center.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, outreach efforts included the following: the NCA website, interpretive and informational signage, teacher workshops ("WILD About Raptors" and "Wildfire and Weeds"), staffed booths at special events, and NCA informational tours. On- and off-site environmental education was generally targeted at students in the lower and middle grades. Volunteers served as campground hosts, improved wildlife habitat, monitored wildlife, picked up trash, and assisted in locating and documenting the condition of Native American petroglyphs.

Science

Ongoing research and monitoring projects include: collecting golden eagle and prairie falcon nest occupancy and production data; increasing the nest success of burrowing owls by developing man-made burrows; monitoring nesting success and productivity of western screech-owls and northern saw-whet owls; studying insect pollinators; reseeding trials of slickspot peppergrass; and conducting treatment trials to determine how best to establish perennial plants and combat invasive annual weeds in a low rainfall zone.

Partnerships and Collaborative Relationships

Partners involved in the above science projects include the USGS, Boise State University, Southern Illinois University, and Oregon State University. USGS and the NCA co-sponsored a workshop to develop a raptor and habitat monitoring strategy. The Idaho Army National Guard patrols the military training area (approximately 28% of the NCA), grades roads, blades firebreaks, and constructs exclosures for sensitive resources. The NCA has an ongoing partnership with Elmore County Commissioners and local interested citizens to resolve long-standing OHV issues. The Snake River Raptor Volunteers, the NCA's main friends group, assisted in the construction and installation of hawk nest platforms and water catchments and in educational efforts. The Peregrine Fund's World Center for Birds of Prey works with the NCA to facilitate teacher workshops. The Kuna Chamber of Commerce operates the sole visitor center in the area providing information and directions to the NCA.

Business Practices

The NCA's total federal allocation for 2008 was \$838,000.

MONTANA

POMPEYS PILLAR NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, riparian and grassland areas within the 51-acre Pompey's Pillar National Monument (Monument) were generally in excellent condition. The exception was grassland covering approximately 1% of the Monument which was disturbed through the recent development of new facilities. The disturbed areas have been reseeded with native plants.

Weather continued to take a toll on pre-historic and historic artwork on the face of Pompeys Pillar. Cultural resources were protected from human impacts by park rangers and volunteers during the primary visitation season and by electronic surveillance throughout the year.

Recreation Facilities, Roads, and Trails Conditions

Recreation facilities, roads, and trails were in good or excellent condition. In 2008, construction began on a secure area to house sales inventory for Pompeys Pillar Historical Association (Historical Association). The Monument has only one deferred maintenance project, for which suitable materials are being sought. In 2008, the Historical Association received a grant to depict a Crow encampment on NCA lands. They have contracted with an architectural/engineering firm to design the project.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, 55,000 individuals visited the Monument. Visitor satisfaction, as determined through a BLM Government Performance Results Act survey, was 100%. Educational information was available at the Monument's new interpretive center, via roving interpretive programs, at the annual Clark Days event, and through summer interpretive programs. Environmental education programs were also provided to approximately 2,000 K-12 students. The Historical Association provided 38 volunteers who contributed 3,166 hours of service, a value of \$61,737. These volunteers staffed the visitor information counter and gift store, applied for grants, and provided interpretive and educational programming.

Science

No science research projects were initiated or in progress during 2008

Partnerships and Collaborative Relationships

As described above, the Pompeys Pillar Historical Association provides the Monument with invaluable services.

Business Practices

The Monument's total federal allocation for 2008 was \$448,710.

MONTANA

UPPER MISSOURI RIVER BREAKS NATIONAL MONUMENT

Natural and Heritage Resources Conditions

The Upper Missouri River Breaks National Monument (Monument) encompasses 377,346 acres in central Montana, including the 149-mile Upper Missouri Wild and Scenic River. The condition of most upland and riparian areas was improving in 2008. Approximately 75% of riparian sites along the river have been assessed, with 95% of sites found to be either in, or moving towards, proper functioning condition. Negative impacts to riparian areas were caused by upstream flow regulation, invasive and noxious plants, and livestock grazing. The BLM is working to address these impacts. Throughout the Monument, the river is listed as a water quality impaired stream by the Montana Department of Environmental Quality. Most pollutants are from upstream sources, though non-point source pollution within the Monument is a contributor.

The Monument's cultural resources were generally stable. In 2008, the majority of the deterioration affecting cultural resources occurred as a result of erosion and as a matter of natural deterioration of wooden features. Paleontological resources were also generally stable.

Recreation Facilities, Roads, and Trails Conditions

In 2008, the general condition of the Monument's recreation facilities was good. Developed launch sites and campgrounds were mostly in good shape, as were remote boat camps. One boat ramp requires major repair. Maintenance occurred on 140 miles of road. The overall road system was generally in good shape. In 2008, a short interpretive trail was constructed between the Monument's new interpretive center, which opened in 2006, and the Missouri River.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, more than 5,223 individuals visited the Monument. Of this number, 694 students attended over 54 educational programs at the interpretive center, a significant increase from 2007. In addition, various educational programs were provided to special interest groups, service clubs, and professional organizations. Take it Outside supported multi-day river trips for local middle school students. Volunteers contributed 2,643 hours at the interpretive center in 2008; approximately 90% of these hours were for the educational programs. Throughout the Monument, volunteers provided a total of 8,894 hours of service valued at \$173,522.

Science

BLM staff at the Monument participated in an ongoing collaboration with USGS to study the regeneration of cottonwoods along the Missouri River and with the BLM's National Science and Technology Center to quantify water quantity necessary to sustain the Monument's cottonwood gallery forests. A University of Arizona researcher and a Tribal Historic Preservation Officer worked with BLM staff to study traditional uses by the Blackfeet Tribe along the Missouri River.

Partnerships and Collaborative Relationships

In 2008, the National Riparian Science Team (NRST) worked with stakeholders to conduct a situation assessment of riparian issues along the Wild and Scenic River. Following the situation assessment, NRST held a workshop for stakeholders to discuss key issues and identify desired outcomes. The BLM participated in numerous other partnerships, including with Montana Preservation Alliance to identify resource concerns along the Nez Perce National Historic Trail; with Montana State University, in association with Project Archaeology, to develop a site stewardship program for the Monument; and with the Undaunted Stewardship, which provides staff and funding for interpretive trails.

Business Practices

The Monument's total federal allocation for 2008 was \$1,880,371.

NEVADA

BLACK ROCK DESERT-HIGH ROCK CANYON EMIGRANT TRAILS NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

Less than one third of the Black Rock Desert – High Rock Canyon Emigrant Trails National Conservation Area (NCA) has been assessed for land health standards. These limited assessments indicate that the majority of upland sites are meeting standards, but that less than 25% of riparian and wetland sites are doing so. In general, the condition of upland sites was stable to improving, but riparian and wetland sites with exposure to wild horses and livestock remained degraded. Restoration of streams and springs is ongoing. Escalating OHV use, particularly in the dunes and hummocks surrounding the Black Rock Desert Playa, is a major concern. Volunteers constructed a fence to protect dunes from illegal OHV use.

The NCA's cultural and historic resources were generally in fair to good condition, except for sites damaged by OHV traffic along the playa margins. In 2008, BLM completed restoration work on two emigrant glyphs sites that were damaged by visitors. Restoration and stabilization work was also completed on the Fox Homestead structure.

Recreation Facilities, Roads, and Trails Conditions

Facilities within the NCA are limited to a handful of semi-developed sites and roads. Most recreation is dispersed in nature and involves motorized travel. Primary access roads are a combination of bi-annually maintained BLM roads and county roads. There is a large backlog of route maintenance and drainage projects. All of the NCA's existing portal signs were replaced in 2008. Informational signs were also installed at key points.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, a new NCA brochure was developed and printed through the Friends of Black Rock High Rock (Friends) with support from the Nevada Commission on Tourism. The Friends also maintain an informational website about the NCA and an informational kiosk in the gateway community of Gerlach. Volunteers from the Friends operated a mobile visitor contact trailer on most weekends through the spring, summer, and fall. Classroom-based environmental education was provided through the Nevada Outdoor School, which taught 7,923 students in 408 classes for a total of 16,870 contact hours.

Science

Research projects ongoing at the NCA include a three-year study of the physical and biological impacts of increased recreational use on the playa; a study of geology and geomorphology associated with Miocene fauna; research into the archaeobacter species associated with hot springs; and cultural resources inventories. Research partners include the University of Georgia, University of Nevada at Reno, Sierra College, and the Desert Research Institute.

Partnerships and Collaborative Relationships

The BLM maintains several key partnerships related to the NCA. The Friends provides direct volunteer management and conservation service, visitor contact, interpretive tours, events coordination, website management, and the development and distribution of publications. The Nevada Outdoor School partners with the BLM to provide outdoor education resources for land agencies, non-profit organizations, youth groups, teachers, and non-traditional educators. Other NCA partners include the Desert Research Institute, the Back Country Horsemen Association, the Great Basin Institute, the Nevada Department of Wildlife, and the High Rock Trekkers.

Business Practices

The NCA's total federal allocation for 2008 was \$889,000.

NEVADA

RED ROCK CANYON NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

No information provided

Recreation Facilities, Roads, and Trails Conditions

Currently the Red Rock Canyon National Conservation Area (NCA) has 8 major highway entrances, approximately 15 secondary road entrances, and 25 roadside overlooks, parking areas, picnicking or campground sites, and visitor interpretation sites. Most of these are unmarked and unidentified except on maps. There are also over 100 miles of foot, bike, and horse trails within the NCA. The trail system is maintained primarily through volunteer labor. In 2008, portions of the NCA's visitor center were shut down due to health concerns. The administrative office was moved into temporary office trailers and a new visitor center is scheduled for completion in 2009.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, an estimated one million individuals visited the NCA, primarily in the vicinity of the Red Rock Canyon Visitor Center and the 13 mile scenic/interpretive drive. A much larger number of visitors is thought to have driven through the NCA or visited its non-fee areas. BLM rangers conducted 57 education programs reaching 2,935 participants at the existing visitor center and presented 64 field programs to 3,314 participants. The BLM is currently constructing a new state-of-the-art visitor center in anticipation of serving the growing number of visitors to the Las Vegas metropolitan area. The BLM relies heavily on volunteer efforts to manage the NCA and its facilities.

Science

No information provided

Partnerships and Collaborative Relationships

BLM staff maintain several key partnerships supporting the effective management of the NCA. The Friends of Red Rock Canyon (FORCC) provides both dollars and labor to coordinate volunteer events and ongoing projects such as cultural site monitoring and archival services. Established in 1984, FORRC was the first BLM friends group. The Red Rock Canyon Interpretive Association provides education and interpretive programs and acts as a non-profit fund raising partner for the BLM. The NCA also partners with the Southern Nevada Agency Partners, the University of Southern Nevada's Public Lands Institute, and a master gardeners group.

Business Practices

In 2008, total expenditures at the NCA were \$1,862,482.

NEVADA

SLOAN CANYON NATIONAL CONSERVATION AREA

Natural and Heritage Resources Conditions

In 2008, natural resources within the Sloan Canyon National Conservation Area (NCA) appeared to be in good condition. The primary factors affecting natural resources were unauthorized motorized use, illegal dumping, and vandalism.

Cultural resource inventories identified 144 cultural resource sites within the NCA, the majority of which are prehistoric. The NCA's cultural resources are generally in good condition, although impacts have occurred as a result of erosion, recreational use, and vandalism.

Recreation Facilities, Roads, and Trails Conditions

Development of a comprehensive trails plan for the NCA is currently underway. The NCA sign plan has been approved and four portal signs have been installed. Unauthorized motorized vehicle use remains a significant issue for the NCA.

Outreach, Environmental Education, Interpretation, and Volunteers

The NCA partnered with the City of Henderson to host a Mobile Planning Workshop at the 2008 American Planning Association National Conference. Twenty individuals participated in the mobile workshop. Participants hiked into the NCA and discussed how stakeholders can work cooperatively to protect natural resources adjacent to the NCA.

Science

In 2008, the University of Las Vegas Geology Department continued research to characterize the volcanic history of the NCA. Information from this investigation will inform trail layout and interpretative displays. Contracts with the USGS Western Ecological Service Center to monitor bighorn sheep and reptiles were concluded in 2008. The herpetological research determined if human disturbances were affecting reptilian communities. The bighorn sheep study characterized genetic diversity within the NCA's bighorn sheep population and determined the extent of migration between the NCA and neighboring populations.

Partnerships and Collaborative Relationships

BLM has recently entered into agreement with the Friends of Red Rock Canyon to help establish a friends group for the NCA.

Business Practices

In 2008, the NCA's total budget was around \$1,500,000.

OREGON

CASCADE-SISKIYOU NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, most of the grazing allotments administered by the BLM on the Cascade-Siskiyou National Monument (Monument) were not meeting one or more of five rangeland health standards. The rate of ecosystem improvement did not adequately sustain natural ecosystem dynamics within the Monument. These findings are based on numerous monitoring results, a livestock impacts study, and a rangeland health assessment and determination. In 2008, the Monument acquired 890 acres of inholdings from the Pacific Forest Trust. Progress was made on reducing invasive Canada thistle within the Monument. Nearly a thousand acres of noxious weeds were treated within the Monument in 2008.

Heritage resource conditions were stable, but additional cultural resource surveys are needed.

Recreation Facilities, Roads, and Trails Conditions

The condition of Monument facilities was generally good. A variety of projects were completed at the Hyatt Lake Campground, including renovations of the visitor area, office, public restrooms, and park facilities. Road maintenance was accomplished based on need and available funding. A significant amount of trail maintenance occurred in partnership with the Pacific Crest Trail Association on segments of the Pacific Crest National Scenic Trail. The Monument Information Center received new paint and carpeting, a new railing for the universal access ramp, and a new three-dimensional geologic model of the vicinity.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, the Monument had approximately 329,173 visitors. This included 41,905 recorded visits at Hyatt Lake Campground and 14,738 on the Pacific Crest National Scenic Trail. The Information Center continued to be cooperatively managed under a memorandum of understanding with the Monument's friend group. A vacant interpretive specialist position has yet to be filled; no face-to-face, environmental education was offered in 2008. Volunteers were engaged in National Public Lands Day projects and, through partner groups, in trail work.

Science

Monument staff initiated a forum with scientists, researchers, and others to coordinate research efforts and begin discussions of a draft Monument science and monitoring strategy. In 2008, science and monitoring projects within the Monument included: forest composition and structural surveys; a study of the impact of fuels reduction on native and non-native plant species; peregrine falcon, bald eagle, pond turtle, fisher, spotted owl, gray owl, and mollusk monitoring and surveys; grazing impact studies; and stream temperature monitoring.

Partnerships and Collaborative Relationships

The BLM and the Monument friends group collaboratively produce bi-annual newsletters, manage the information center, and create informational displays and exhibits. In 2008, The BLM also partnered with the Pacific Crest Trail Association on numerous trails projects and - along with Crater Lake National Park and Willamette, Umpqua, and Rogue-River Siskiyou National Forests- on the Southern Oregon Cascades Pacific Crest Trail Map. The Oregon Division of Forestry's Monument liaison works directly with the BLM's interdisciplinary team and interacts with the local community.

Business Practices

The Monument's total federal allocation for 2008 was \$1,007,679.

OREGON

STEENS MOUNTAIN COOPERATIVE MANAGEMENT AND PROTECTION AREA

Natural and Heritage Resources Conditions

There was little adverse impact to natural and heritage resources at the Steens Mountain Cooperative Management and Protection Area (CMPA) in 2008, with the exception of unnatural juniper expansion and medusahead and cheatgrass invasions. Juniper treatments and prescribed fire are being applied cooperatively across the CMPA boundaries to address these issues. In cooperation with Harney County Strategic Weed Attack Team, approximately 27,000 acres were monitored for noxious weeds and 65 acres were treated. Ninety-nine percent of the wilderness and wilderness study areas have been assessed and meet land health standards. A total of 8,194 acres were inventoried for cultural resources in 2008.

Recreation Facilities, Roads, and Trails Conditions

The CMPA's main route, the Steens Loop Road, was in relatively good condition, though the public periodically complained of unsafe washboard conditions. The road was graded twice in 2008, though until recently there were three annual cycles of grading. Other roads were maintained as needed, subject to available funding. An ongoing \$300,000 project to address deferred maintenance at the CMPA's campgrounds will conclude in 2009. New picnic tables, fire rings, and water lines were purchased and are being installed at the Page Springs campground. The Northwest Youth Corps, assisted by volunteers from Back Country Horseman of America, performed trail maintenance on over five miles of trails.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, 226,078 individuals visited the CMPA, a slight decrease from 2007. Special recreation permit holders and volunteers provided the majority of interpretive programs. CMPA staff and partners continued to implement an interpretive plan for the Wildland Juniper Management Area. This project was partially funded by a 2007 Oregon Watershed Enhancement Board grant and has been designated for 2009 challenge cost share funds. Volunteers provided over 1,400 hours of service in 2008, undertaking projects such as pulling fences, leading interpretive tours, and performing trail maintenance.

Science

In 2008, an archaeological team from University of Wisconsin-Milwaukee spent six weeks in the Roaring Butte area of Steens Mountain inventorying 154 acres, recording two archaeological sites, and mapping and excavating 12 test pits. Full excavation is likely to begin in the summer of 2009. Researchers from the U.S. Forest Service and the Natural Areas Council continued to investigate the effects of global warming on high-elevation plant communities in the Little Wildhorse Lake Research Natural Area. Eastern Oregon Agricultural Research Service and Oregon State University continued to partner with the BLM to understand results and opportunities associated with juniper treatment.

Partnerships and Collaborative Relationships

The Steens Mountain Advisory Council and the Steens Mountain Landowners Group are reported to feel a great sense of "ownership" for the CMPA. As a result, they have not yet endorsed development of a new friends group. The Burns Paiute Tribe continued to act as a cooperating agency for major efforts, as did Harney County, the U.S. Fish and Wildlife Service, and the Oregon Department of Fish and Wildlife. CMPA staff also partnered with local ranchers to resolve fencing and grazing issues.

Business Practices

The CMPA's total federal allocation for 2008 was \$1,355,384.

YAQUINA HEAD OUTSTANDING NATURAL AREA

OREGON

Natural and Heritage Resources Conditions

The overall condition of natural resources at Yaquina Head Outstanding Natural Area (ONA) varied from good to excellent in 2008. Over the past seven years, substantial progress has been made in controlling non-native plants, particularly bull thistle and blackberry. In 2008, staff removed lead-based paint contaminants from the soil on approximately one-acre around the lighthouse.

Recreation Facilities, Roads, and Trails Conditions

The general condition of the ONA's facilities, roads, and trails varied from fair to good. In 2008, new portal and entrance signs were installed. Friends of Yaquina Lighthouses and a State of Oregon Historic Preservation Office grant funded a \$20,000 project to add new supports to the lighthouse's iron staircase. The interpretive center, maintenance building, main road, and parking areas remain in need of repair. Maintenance projects have been funded to address these issues with completion scheduled for 2009.

Outreach, Environmental Education, Interpretation, and Volunteers

In 2008, for the first time, the ONA had a full time interpretive staff. Visitation totaled 326,263 individuals, with the interpretive center hosting 26 percent of visitors. Approximately 1,253 interpretive or educational programs were delivered in 2008. The bulk of these were costumed lighthouse tours. Almost 5,000 students visited the tidepools, with most receiving a formal presentation on tidepool ecology. Thirty-five volunteers provided a total of 8,467 hours of service at Yaquina Head (a value of \$146,733).

Science

A number of researchers made use of the ONA. An ongoing agreement allows Oregon State University's College of Oceanic and Atmospheric Sciences to maintain their mapping equipment on site. The mapping system is used to track coastal ocean currents. For the second year, a partnership of researchers from Oregon State University/Hatfield Marine Science Center, the U.S. Fish and Wildlife Service, and Oregon Department of Fish and Wildlife monitored the ONA's colony of murre, a species of seabird. This murre colony is the largest in Oregon and one of the largest on the entire West Coast. In addition, the Oregon State University Marine Mammal Institute used the ONA as a platform to study the gray whale migration.

Partnerships and Collaborative Relationships

The BLM has been partnering with the Friends of Yaquina Lighthouses for 11 years. Through a formal assistance agreement, Friends of Yaquina Lighthouses operates a successful gift store in the interpretive center. The BLM receives 15 percent of the net proceeds from the store and uses these funds to hire summer interns, support the volunteer program, and purchase interpretive materials. Long-term partnerships are also ongoing with the U.S. Fish & Wildlife Service, U.S. Coast Guard, and Oregon State Parks & Recreation Department. U.S. Fish & Wildlife provided the ONA with wildlife interpretive volunteers for the summer of 2008.

Business Practices

The ONA's total federal allocation for 2008 was \$428,000.

UTAH

GRAND STAIRCASE-ESCALANTE NATIONAL MONUMENT

Natural and Heritage Resources Conditions

In 2008, BLM employees and partners performed significant natural resource inventory and restoration work at Grand Staircase-Escalante National Monument (Monument). Shrub and grassland inventory was conducted on 15,000 acres, followed by 2,000 acres of shrub/grass treatments. Noxious weed inventory was conducted on 20,000 acres, followed by 1,000 acres of noxious weed treatments. Numerous springs were fenced and refurbished to ensure continued provision of adequate water for wildlife and livestock. As part of an ongoing reintroduction program, four river otters were released into the Escalante River in 2008.

The overall condition of the Monument's cultural resources was good. Livestock grazing continued to put some pressure on some archaeological sites, but ongoing law enforcement efforts have significantly reduced the larger problem of off-road OHV use.

Recreation Facilities, Roads, and Trails Conditions

Until 2008, primary responsibility for maintenance of Monument roads was undertaken by Garfield and Kane counties. Garfield County continues to maintain the roads within its borders in generally good condition. Kane County has interpreted a recent U.S. District Court ruling as an injunction against their continued maintenance of Monument roads. Most roads in the Kane County section of the Monument remain passable but are in poor condition. The BLM has repaired site specific road damage, but general maintenance funds are not available. The condition of the Monument's four campgrounds varied from fair to excellent. In 2008, Utah State Parks awarded the Monument and the Grand Staircase Escalante Partners a grant to improve equestrian trailheads.

Outreach, Environmental Education, Interpretation, and Volunteers

The Monument had approximately 711,310 visitors in 2008. The BLM operates or co-operates four visitor centers and a contact station in the Monument's gateway communities. In addition to hosting several large events, Monument staff provided 15 interpretive school programs and 86 programs to 1,431 participants as part of its Walks and Talks series (cosponsored by Grand Staircase Escalante Partners) and 15 interpretive talks to school groups. Two traveling paleontology exhibits reached thousands of individuals. In 2008, the Monument also collaborated with other BLM offices to place 57 interpretive and informational signs throughout the Paria Plateau.

Science

The Monument encompasses world class paleontological, geologic, and archeological sites. Over the last decade there have been more than 148 research projects conducted within the Monument, not including internal BLM monitoring and research. World class geology, paleontology, archeology, ecology, and climate research is ongoing.

Partnerships and Collaborative Relationships

Grand Staircase-Escalante Partners remains the Monument's most active partner organization. The organization has a strong membership core and implements volunteer and outreach programs. Monument staff also collaborate with numerous other agencies, non-governmental organizations, and academic institutions.

Business Practices

The Monument's total federal allocation in 2008 was \$5,092,000.